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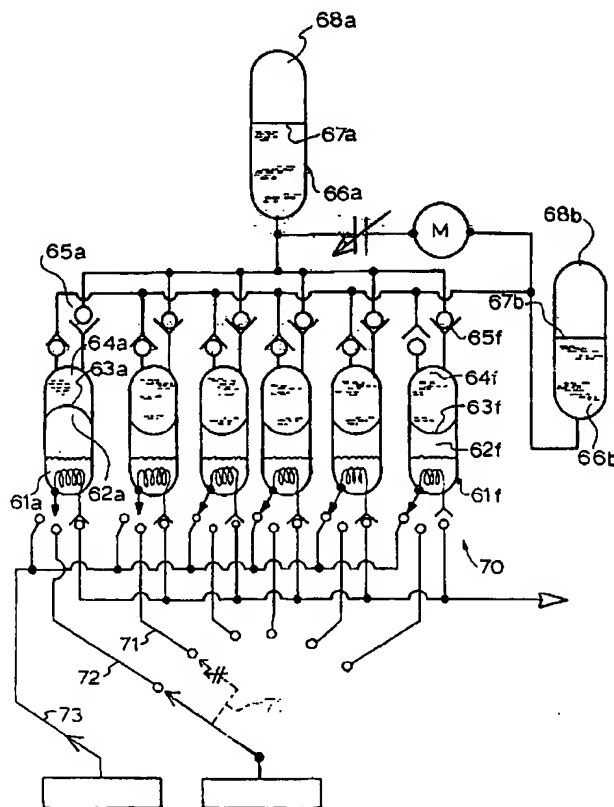
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## Declarations under Rule 4.17:

- as to the applicant's entitlement to claim the priority of the  
earlier application (Rule 4.17(iii)) for all designations
- of inventorship (Rule 4.17(iv)) for US only

[Continued on next page]

(54) Title: ENGINE FOR CONVERTING THERMAL ENERGY TO STORED ENERGY



(57) Abstract: The engine for converting thermal energy to stored fluid energy includes expansion cylinders (61a-f) with expansion chambers (62a-f) and flexible membranes (63a-f). Heating and cooling of working fluid inside the cylinders (61a-f) is carried out by fluid supply lines (73, 71) communicating with external heat resources and sinks. Pressure accumulator (66a) is adapted to store a pressurised fluid (64a-f), such as hydraulic oil, from the individual cylinders (61a-f). In use, this pressurised fluid is delivered at an elevated and above a minimum threshold pressure level, irrespective of the irregularities of the movement of the expansion cylinders (61a-f).

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*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

**A. CLASSIFICATION OF SUBJECT MATTER**Int. Cl. <sup>7</sup>: F02G 1/043

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

See below under "Electronic database consulted"

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

AU: IPC: F02G 1/043; F01K 27/00

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

DWPI: F02G 1/04? ; F01K 27/00 with keywords : heat, cool, store and similar terms

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 4617801A (CLARK, Jr) 21 October 1986 The whole document	1-19
X	WO 82/00319A1 (MECHANICAL TECHNOLOGY, INC.) 4 February 1982 The whole document	1-19
X	EP 0178348B1 (EDER) 6 September 1989 Figure 1 and accompanying description	1-19

☒ Further documents are listed in the continuation of Box C☒ See patent family annex

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"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
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"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

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## INTERNATIONAL SEARCH REPORT

International application No.

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	DE 3246633A1 (EDER) 20 June 1984 Figure and accompanying description	1-19
A	US 4270350A (CHEVALIER) 2 June 1981	
A	US 4498302A (DJELOUAH) 12 February 1985	

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

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This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report				Patent Family Member			
US	4617801	AU	65485/86	BR	8607009	EP	246275
		FI	873311	WO	8703357		
WO	8200319	CA	1187294	EP	55769	US	4350012
		US	4345437				
EP	178348	AU	15535/83	DE	3220071	EP	110905
		WO	8304281	DE	3314705		
DE	3246633	NONE					
US	4270350	NONE					
US	4498302	BE	894993	CH	650313	DE	3242312
		GB	2109868	IT	1154552	FR	2516593
		AR	231328	FR	2519693		
END OF ANNEX							